

Water-Data Report 2008

01411355 INGRAM THOROFARE AT AVALON, NJ

INGRAM THOROFARE

LOCATION.--Lat 39°06'37", long 74°44'03" referenced to North American Datum of 1983, Avalon Borough, Cape May County, NJ, Hydrologic Unit 02040302, on fishing pier at east end of Old Avalon Boulevard, 0.5 mi east of bridge carrying County Route 601 (Avalon Boulevard) over Ingram Thorofare, 1.0 mi west of Avalon, 1.0 mi southwest of Townsends Inlet, and 1.6 mi east of Upper Island in Great Sound.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Continuous-record tide gage, October 1977 to May 1978, 1979 to 1981, May 13, 2000 to current year. Annual maximum tide, water years 1984 and 1993. Unpublished fragmentary gage-height record, May 1997 to May 2000.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is at 0.00 ft NAVD of 1988. To determine approximate elevations to NGVD of 1929, add 1.29 ft. To determine approximate elevations in Mean Lower Low Water datum, add 2.26 ft, (revised to Tidal Epoch 1983-2001). From October 1977 to May 1978, water-stage recorder located 200 ft south of current station and datum of gage at 0.00 ft NGVD of 1929. From 1978 to 1981, crest-stage gage located 200 ft south of current station and datum of gage at 0.00 ft NGVD of 1929. Data published to NGVD of 1929 can be adjusted to NAVD of 1988 by subtracting 1.29 ft. Online annual tidal peaks have been adjusted to current datum.

REMARKS.--Partially missing gage-height record on short portions of 10 days. From Nov 28, 2006 to Aug 15, 2008, gage could not measure tide levels below -3.60 ft and above +3.66 ft. From Nov 28, 2006 to Aug 15, 2008, tide levels below -3.60 ft and above +3.66 ft were estimated. From Apr 6, 2005 to Nov 28, 2006, gage could measure entire tidal range; prior to Apr 6, 2005, gage could not measure tide levels below -3.39 ft or above +3.69 ft. Summaries for months with short periods of missing gage-height record have been estimated with little or no loss of accuracy. Some periods cannot be estimated and are noted by dashed (--) lines. Satellite stage telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation recorded, 6.29 ft (from tidal crest-stage gage, adjusted to NAVD of 1988), Mar 29, 1984; minimum elevation recorded, undetermined, likely occurred Feb 17, 2007 as indicated by nearby reference gages.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, estimated at 5.0 (from nearby reference gages), May 12; minimum elevation, estimated at -5.1 (from nearby reference gages), Mar 9.

Statistics of Tide Elevations, in feet
Water Year October 2007 to September 2008
[e, estimated]

Month	Mean High Tide	Mean Water Level	Mean Low Tide
October	2.07	0.12	-1.86
November	1.79	-0.16	-2.14
December	1.62	-0.33	-2.34
CALENDAR YEAR 2007	1.71	-0.24	-2.24
January	1.45	-0.45	-2.41
February	1.44	e-0.5	e-2.5
March	1.48	e-0.4	e-2.4
April	1.95	0.04	-1.92
May	2.16	0.16	-1.74
June	1.86	-0.11	-2.16
July	1.80	-0.18	-2.23
August	1.99	0.01	-2.05
September	2.16	0.27	-1.70
WATER YEAR 2008	1.84	-0.12	-2.12

01411355 INGRAM THOROFARE AT AVALON, NJ—Continued

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
[e, estimated]

Day	High-high	Mean	Low-low	High-high	Mean	Low-low	High-high	Mean	Low-low	High-high	Mean	Low-low
	October				November				December			
1	2.74	0.10	-2.06	1.99	-0.35	-2.24	0.51	-1.38	-3.38	1.14	-0.54	-2.45
2	2.59	0.17	-1.82	2.67	0.69	-1.19	1.46	-0.37	-1.97	0.87	-1.03	-2.60
3	2.29	0.08	-1.72	e3.8	e2.0	-0.42	1.65	-0.80	-3.61	1.43	-0.65	-2.28
4	2.18	0.05	-1.82	2.04	0.05	-2.24	0.14	-1.70	-3.41	1.55	-0.98	-3.23
5	1.99	-0.08	-1.88	1.62	-0.26	-2.29	1.26	-0.53	-2.13	0.65	-1.30	-3.00
6	2.04	-0.08	-1.88	2.42	-0.20	-2.65	2.06	-0.15	-2.23	1.43	-0.65	-2.40
7	2.59	0.14	-2.04	1.44	-0.56	-2.49	1.90	-0.49	-2.34	2.21	-0.37	-2.42
8	2.26	0.31	-1.80	2.18	-0.09	-2.32	1.81	-0.77	-2.73	2.15	-0.56	-2.74
9	3.22	0.67	-1.98	2.43	0.07	-1.99	2.00	-0.66	-2.88	2.19	-0.75	-3.39
10	3.07	1.00	-1.07	2.76	0.58	-1.67	2.33	-0.28	-2.43	2.09	-0.64	-3.02
11	3.36	0.92	-1.25	2.75	0.47	-1.44	2.42	-0.22	-2.30	2.51	-0.15	-2.56
12	2.20	0.13	-1.95	2.14	-0.31	-2.37	1.85	-0.83	-2.94	2.27	-0.19	-2.30
13	2.48	0.18	-1.83	2.24	-0.24	-2.04	2.60	-0.11	-2.38	2.54	0.26	-1.79
14	2.18	-0.13	-1.97	2.25	-0.03	-1.78	2.36	-0.03	-1.97	2.71	0.69	-1.53
15	2.18	-0.09	-1.73	2.00	-0.22	-1.70	2.12	0.00	-2.11	2.02	-0.37	-2.67
16	2.01	-0.14	-1.72	1.25	-0.94	-2.67	3.62	1.12	-1.69	1.22	-0.86	-3.00
17	1.97	-0.06	-1.52	1.14	-0.97	-2.60	0.58	e-2.1	e-4.1	1.86	0.12	-1.56
18	2.07	0.02	-1.46	1.91	-0.08	-1.72	0.65	-1.29	-3.12	3.15	-0.02	-2.61
19	2.32	0.30	-1.19	2.20	0.47	-1.45	1.61	-0.42	-2.52	1.88	-0.56	-2.67
20	2.12	0.04	-2.02	2.20	0.07	-2.40	2.33	-0.19	-2.59	2.30	e-0.7	e-4.0
21	1.69	-0.46	-2.42	2.36	0.12	-2.30	2.86	0.79	-1.37	1.59	e-1.2	e-3.9
22	2.04	-0.34	-2.63	2.92	0.06	-3.35	3.55	0.65	-1.82	2.20	e-1.0	e-3.8
23	2.29	-0.15	-2.35	2.94	-0.21	-2.80	3.39	0.41	-2.20	2.23	e-0.8	e-3.7
24	2.50	-0.11	-2.92	2.95	-0.31	-3.17	2.99	-0.51	-3.23	2.49	-0.35	-3.41
25	e3.7	e1.3	-2.17	2.71	-0.55	-3.50	2.21	e-1.0	e-4.1	2.10	-0.68	-3.23
26	e3.9	e1.1	-1.66	2.67	-0.38	-3.29	2.78	0.13	-3.30	1.93	-0.50	-2.74
27	e3.6	e0.3	-2.70	2.20	-0.97	-3.48	3.48	0.85	-1.54	2.55	0.32	-1.59
28	2.74	-0.37	-3.06	1.88	e-1.1	e-4.2	2.14	-0.12	-2.22	2.53	0.88	-0.89
29	2.97	-0.18	-2.60	2.07	-0.61	-2.65	1.80	-0.05	-2.13	2.25	0.34	-1.36
30	2.36	-0.49	-2.65	1.68	-0.89	-2.68	1.50	-0.13	-2.09	1.79	-0.72	-2.48
31	2.28	-0.36	-2.36	---	---	---	2.48	-0.21	-2.19	0.36	-1.01	-2.34
Max	e3.9	e1.3	-1.07	e3.8	e2.0	-0.42	3.62	1.12	-1.37	3.15	0.88	-0.89
Min	1.69	-0.49	-3.06	1.14	e-1.1	e-4.2	0.14	e-2.1	e-4.1	0.36	-1.30	e-4.0

01411355 INGRAM THOROFARE AT AVALON, NJ—Continued

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
[e, estimated]

Day	High-high	Mean	Low-low	High-high	Mean	Low-low	High-high	Mean	Low-low	High-high	Mean	Low-low
	February				March				April			
1	1.51	---	---	1.09	-0.73	-2.05	1.35	-0.85	-2.85	1.87	0.08	-1.99
2	0.92	-1.35	-2.87	0.58	-1.18	-2.49	0.70	-1.09	-2.86	2.47	0.23	-2.28
3	0.99	-1.02	-2.74	1.08	-0.81	-2.46	1.38	-0.82	-2.99	3.40	0.82	-1.78
4	1.76	-0.39	-1.98	1.39	-0.69	-2.44	2.21	-0.38	-3.06	3.20	0.54	-2.30
5	2.27	-0.17	-2.35	1.88	-0.20	-1.78	2.68	-0.08	-2.99	3.21	0.13	-2.65
6	2.55	-0.22	-2.74	2.28	-0.30	-2.79	e4.1	e0.8	-2.70	3.15	-0.05	-2.89
7	2.54	-0.05	-2.49	2.78	0.23	-2.87	e4.0	e1.2	-1.49	3.22	-0.05	-2.73
8	3.08	0.27	-2.34	2.49	---	---	3.17	0.81	-1.83	2.81	-0.34	-2.94
9	2.68	0.01	-2.65	0.31	---	e-5.1	2.87	0.00	-2.42	2.13	0.39	-2.41
10	2.49	-0.65	-3.45	1.59	e-1.4	e-4.9	1.37	-0.26	-2.50	e3.9	e0.9	-1.42
11	0.25	e-2.0	e-4.2	2.48	-0.69	-3.34	2.40	-0.16	-2.21	2.80	1.00	-1.46
12	0.51	e-1.3	e-3.9	1.42	-0.40	-2.62	2.60	0.02	-1.89	e5.0	---	1.50
13	2.30	---	---	1.94	-0.37	-2.64	2.34	0.03	-1.95	3.64	1.54	-0.61
14	2.16	---	-2.57	2.48	0.11	-1.82	2.24	0.09	-2.04	2.38	0.61	-1.42
15	1.79	-0.94	-3.11	2.74	0.50	-1.61	1.69	-0.17	-2.17	2.41	0.50	-1.47
16	1.73	-0.70	-2.79	3.18	0.87	-1.55	1.68	-0.30	-2.45	2.78	0.60	-1.35
17	2.26	-0.20	-2.32	1.97	0.06	-1.90	2.20	0.04	-2.21	2.41	0.51	-1.48
18	2.51	-0.20	-2.81	2.50	0.56	-1.40	2.28	0.17	-1.93	2.73	0.33	-2.08
19	2.19	-0.83	-3.33	3.08	0.85	-1.60	2.41	-0.03	-2.22	2.29	-0.08	-2.09
20	1.66	e-1.1	e-4.2	2.24	0.02	-2.68	2.81	0.18	-2.12	2.78	0.14	-2.09
21	1.78	-0.82	-3.60	0.98	e-1.3	e-4.1	2.72	0.55	-1.54	2.64	0.24	-1.72
22	2.28	-0.14	-3.24	1.95	e-1.0	e-4.0	2.32	0.15	-1.67	2.30	-0.09	-1.91
23	2.45	0.05	-2.48	1.86	-0.50	-2.97	2.12	-0.20	-1.98	2.26	-0.29	-2.15
24	1.88	-0.22	-2.36	1.82	-0.53	-2.55	2.08	-0.39	-2.10	2.25	-0.05	-1.88
25	1.50	-0.62	-2.58	1.92	-0.30	-2.36	0.99	-0.11	-1.85	0.97	-0.14	-1.84
26	2.25	-0.12	-2.15	0.20	-0.90	-2.70	2.13	0.42	-1.48	1.99	-0.38	-2.04
27	1.12	-0.29	-1.94	1.46	-0.46	-2.07	2.50	0.63	-0.81	1.37	-0.69	-2.58
28	0.93	-1.17	-2.79	1.75	-0.26	-1.73	2.38	0.61	-0.88	1.55	-0.22	-1.87
29	0.63	-0.62	-1.91	1.62	-0.42	-1.78	2.32	0.29	-1.39	1.37	-0.49	-2.37
30	---	---	---	1.24	-0.44	-1.70	2.04	0.09	-1.64	1.66	-0.54	-2.72
31	---	---	---	1.18	-0.48	-1.85	---	---	---	2.15	-0.26	-2.65
Max	3.08	0.27	-1.91	3.18	0.87	-1.40	e4.1	e1.2	-0.81	e5.0	---	1.50
Min	0.25	---	---	0.20	---	e-5.1	0.70	-1.09	-3.06	0.97	-0.69	-2.94

01411355 INGRAM THOROFARE AT AVALON, NJ—Continued

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
[e, estimated]

Day	High-high	Mean	Low-low	High-high	Mean	Low-low	High-high	Mean	Low-low	High-high	Mean	Low-low
	June			July			August			September		
1	2.75	-0.18	-2.88	2.99	-0.01	-2.71	3.14	0.15	-2.57	2.25	-0.12	-2.49
2	2.92	-0.09	-2.87	2.89	-0.21	-2.98	3.01	0.14	-2.43	2.30	0.00	-2.45
3	3.08	-0.15	-3.00	2.68	-0.43	-3.12	2.58	0.01	-2.50	2.69	0.38	-1.62
4	3.21	---	-3.19	2.93	-0.42	-3.33	2.23	-0.17	-2.51	2.11	-0.06	-1.81
5	3.08	-0.09	-2.66	2.75	-0.12	-2.61	2.15	-0.02	-2.39	1.85	-0.22	-2.00
6	2.86	-0.18	-2.71	2.50	-0.12	-2.41	2.13	0.12	-1.86	2.70	0.30	-1.74
7	1.47	-0.37	-2.72	1.61	-0.26	-2.44	2.29	0.26	-1.61	1.69	-0.44	-1.95
8	2.38	-0.39	-2.68	1.91	-0.43	-2.50	2.18	0.19	-1.52	1.67	-0.32	-1.59
9	2.25	-0.18	-2.38	1.44	-0.48	-2.50	1.98	0.10	-1.52	1.73	-0.12	-1.59
10	1.95	e-0.1	-2.10	1.79	-0.25	-2.09	2.13	0.16	-1.42	2.16	0.12	-1.43
11	1.76	-0.10	-2.12	1.86	-0.10	-1.83	1.98	0.16	-1.44	1.99	-0.01	-1.58
12	1.62	-0.28	-2.15	1.78	-0.11	-1.73	2.17	0.08	-1.55	2.20	-0.10	-1.90
13	1.68	-0.32	-2.18	2.12	0.02	-1.64	2.41	0.04	-1.70	2.37	-0.10	-2.13
14	2.08	-0.20	-2.03	2.14	-0.01	-1.71	2.53	0.14	-1.75	2.61	0.16	-2.17
15	2.48	0.19	-1.81	2.26	-0.06	-1.82	2.60	e0.2	-1.90	2.28	-0.22	-2.68
16	2.40	0.26	-1.57	2.37	-0.07	-1.90	2.39	-0.09	-2.18	2.51	-0.02	-2.67
17	2.55	0.15	-2.00	2.38	-0.16	-2.15	2.44	-0.21	-2.41	2.65	0.10	-2.40
18	2.57	0.18	-1.74	2.27	-0.30	-2.27	2.29	-0.34	-2.61	2.61	0.10	-2.44
19	2.61	0.08	-1.73	2.16	-0.41	-2.42	2.12	-0.35	-2.71	3.35	0.85	-1.47
20	2.36	-0.08	-1.96	2.23	-0.41	-2.53	2.38	-0.03	-2.27	2.92	0.53	-1.59
21	2.20	-0.22	-2.06	2.38	-0.18	-2.28	1.92	-0.38	-2.58	2.40	0.00	-1.94
22	2.29	-0.21	-2.10	2.15	-0.15	-2.19	2.07	-0.35	-2.59	2.48	0.15	-2.08
23	1.31	-0.10	-1.97	1.94	-0.11	-2.26	2.15	-0.28	-2.46	2.93	0.85	-1.04
24	2.15	-0.36	-2.23	1.78	-0.29	-2.40	2.21	-0.19	-2.20	3.16	1.02	-0.78
25	1.74	-0.46	-2.38	1.89	-0.30	-2.28	2.28	-0.22	-2.18	4.10	1.87	0.05
26	1.60	-0.31	-2.39	1.99	-0.28	-2.43	2.65	0.20	-1.98	3.19	1.35	-0.96
27	2.06	-0.02	-2.08	2.40	-0.11	-2.24	2.84	0.22	-2.02	2.88	0.62	-1.86
28	2.37	0.11	-1.97	2.61	0.08	-2.17	2.99	0.31	-2.16	2.79	0.63	-1.76
29	2.60	0.09	-2.17	2.63	-0.09	-2.56	3.07	0.41	-2.10	2.79	0.45	-1.88
30	2.89	0.00	-2.58	3.08	0.02	-2.62	2.59	0.09	-2.52	2.71	0.37	-2.10
31	---	---	---	3.23	0.14	-2.51	2.43	-0.06	-2.58	---	---	---
Max	3.21	0.26	-1.57	3.23	0.14	-1.64	3.14	0.41	-1.42	4.10	1.87	0.05
Min	1.31	-0.46	-3.19	1.44	-0.48	-3.33	1.92	-0.38	-2.71	1.67	-0.44	-2.68

01411355 INGRAM THOROFARE AT AVALON, NJ—Continued